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(19) **United States**(12) **Patent Application Publication****Fagan et al.**(10) **Pub. No.: US 2008/0290007 A1**(43) **Pub. Date: Nov. 27, 2008**(54) **CENTRIFUGAL LENGTH SEPARATION OF
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24, 2007.**Publication Classification**(51) **Int. Cl.**
B07C 5/12 (2006.01)(52) **U.S. Cl.** **209/659**(57) **ABSTRACT**

Processes for separating carbon nanotubes according to their length are described. The processes involve forming highly dispersed systems of the nanotubes followed by creating an array of layers in a centrifugation vessel. Each layer contains dispersed nanotubes with varying proportions of a density adjusting agent. The vessel array includes a first layer containing the nanotubes to be separated, and one or more layers of lesser density disposed above the first layer. Upon centrifuging for a sufficient period of time, a series of liquid fractions form in the vessel. The average length of nanotubes in a respective fraction is different than the average length of nanotubes in the other fractions.

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